

Division of Waste Management Solid Waste Section

| UNIT | UNIT TYPE: | | | | | | | | | | | | | |
|-----------------|------------|--------------------------|--|------------------|--|------------------------|---|---------|--|------|--|----------------------------|--|--|
| Lined MSWLF | | LCID | | YW | | Transfer | | Compost | | SLAS | | COUNTY: Durham | | |
| Closed MSWLF | | HHW | | White goods | | Incin | X | T&P | | FIRM | | PERMIT NO.: 32-09 I | | |
| CDLF | | Tire T&P / Collection | | Tire Monofill | | Industrial Landfill | | DEMO | | SDTF | | FILE TYPE: COMPLIANCE | | |

Date of Site Inspection: September 27, 2011 Date of Last Inspection: December 03, 2010

FACILITY NAME AND ADDRESS:

GlaxoSmithKline LLC Incinerator 3029 E. Cornwallis Road Research Triangle Park, NC 27709

GPS COORDINATES: N: <u>35.92020</u> E: <u>78.86788</u>

FACILITY CONTACT NAME AND PHONE NUMBER:

Lindsey C. Walata, Environmental Manager w. 919-483-4640 c. 919-607-0720 f. 919-315-0240 lindsey.c.walata@gsk.com

FACILITY CONTACT ADDRESS:

Lindsey C. Walata, Environmental Manager GlaxoSmithKline LLC PO Box 13398 Five Moore Drive Research Triangle Park, NC 27709-3398

PARTICIPANTS

John Patrone, NCDENR – Solid Waste Section (SWS) Lindsey C. Walata, GlaxoSmithKline LLC Greg Brooks, Clean Harbors Environmental Services, Inc. David Fletcher, Johnson Controls, Inc.

STATUS OF PERMIT:

Permit To Operate (PTO - modification) issued July 9, 2010 PTO expiration date March 22, 2012

PURPOSE OF SITE VISIT:

Comprehensive Audit

STATUS OF PAST NOTED VIOLATIONS:

None

OBSERVED VIOLATIONS

None

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The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

On September 27, 2011, John Patrone met with Lindsey Walata, Greg Brooks, and David Fletcher to conduct a comprehensive audit of the GlaxoSmithKline LLC Incinerator located within its industrial park on E. Cornwallis Road in Research Triangle Park, Durham County.

- 1. The incinerator is located in building P of the GlaxoSmithKline LLC (GSK) industrial park.
- 2. Ms. Walata stated that the incinerator is no longer in operation and will be dismantled. The following have been verified by SWS: natural gas line disconnected and natural gas valve locked, heat exchange tubes removed, and bag house filter bags removed.
- 3. The incinerator was operated by Clean Harbors Environmental Services, Inc.
- 4. Waste material incinerated was from GSK facilities located throughout the country. Occasionally, seized material from law enforcement agencies was destroyed.
- 5. Incinerator throughput records (of material received) were verified for January through August 2011. The incinerator last operated on August 30, 2011. The incinerator was operated three or four days per week. Regulated medical waste was stored in a freezer and destroyed when the incinerator was next operated.
- 6. Records indicated that from January through August 30, 2011 regulated medical waste accounted for < 10 percent of waste material destroyed and that all waste destroyed was from GSK facilities.
- 7. Lime was used, in a separate operation, to neutralize non-hazardous off-gases. The spent lime was stored in a sealed container and shipped-out to the same location as the incinerator ash. Records for January through August 30, 2011 indicate that 64 tons of lime was hauled off.
- 8. Records of incinerator ash collected from January through August 30, 2011 indicated that 216.8 tons of ash was hauled off. Ash is picked up by Waste Management, Inc. and brought to Upper Piedmont Regional Municipal Solid Waste (MSW) Landfill (73-04).
- 9. The facility annual report is dated July 25, 2011. Throughput (of material received) for July 2010 through June 2011 is 758.44 tons.
- 10. Incinerator ash was stored in roll-off containers, covered with a tarp, until hauled off. Mr. Brooks stated that there were commonly no more than two containers on site awaiting removal at any given time.
- 11. Ash removed from the incinerator was pushed into a cooling tank then conveyed vertically (to drain off water) then dropped into cooling/temporary storage hoppers. The hoppers have holes that allow the ash to drain onto the floor and out of the building via a central located (floor) drain. The "ash water" collects in a settling tank then is piped to the local wastewater treatment plant. The dewatered ash is dumped into roll-off containers.
- 12. Ms. Walata stated that City of Durham water was exclusively used for the incinerator cooling chamber from late January through August 30, 2011. And that, although permitted to, reclaimed water (GSK wastewater containing concentrates of pharmaceutical compounds from research & development) was not used. Wastewater associated with business operation was shipped off site for destruction.
- 13. Ms. Walata stated that staff associated with the incinerator were routinely trained. Facility records indicate that the following personnel have been certified in commercial industrial solid waste incinerator (CISWI) operation: Norman Anderson, Larry Wells, and David Fletcher.
- 14. Temperature records for the primary and secondary chambers were reviewed. The incinerator computer control system continuously monitored temperatures daily, hourly, and by minute and second. Temperature records reviewed indicate that the primary chamber was maintained at > 1200°F and the secondary chamber was maintained at > 1800°F. Mr. Brooks stated that if the temperature were to fall below the minimum prescribed, the computer control system would indicate an error and lock the incinerator door, such that material could not enter/be loaded.

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- 15. Incinerator ash is analyzed semi-annually. Ash analysis was conducted on 10/27/10 by CompuChem, a Division of Liberty Analytical Corporation, Inc. and on 04/15/11 by TestAmerica Laboratories, Inc. Tests were conducted for: metals, semi-volatiles, volatiles, toxicity characteristic leaching procedure (TCLP), and paint filter test. Mr. Brooks stated that tests conducted were representative of weekly ash samples.
- 16. During the inspection no ash was observed stored on site. A roll-off container used for ash storage and hauling and the temporary storage hoppers were empty.
- 17. The Division of Air Quality (DAQ) issued a permit for the incinerator on 12/09/10 (No. 04612731, expiration 11/30/13) and issued a letter dated 01/14/10 stating that emissions data submitted for the stack test conducted on 09/02/09 is acceptable.
- 18. Ms. Walata submitted a letter to the SWS permitting branch dated September 12, 2011 stating that the incinerator ceased operation on August 30, 2011 and that no further incineration will occur. And that GSK is requesting that the incinerator permit (32-09 I) be closed.

Phone: <u>336-771-5095</u> Fax: <u>336-771-4631</u>

19. This audit report verifies that the incinerator appeared to no longer be in operation.

Please contact me if you have any questions or concerns regarding this inspection report.

John Patrone

Environmental Senior Specialist

Regional Representative

| Sent on: September 30, 2011 | X | Email | | Hand delivery | | US Mail | | Certified No. [_] |
|-----------------------------|---|-------|--|---------------|--|---------|--|-------------------|
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Copies: Dennis Shackelford, Eastern District Supervisor

Shawn McKee, Compliance Officer Donna Wilson, Permit Engineer

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Digital photographs taken September 27, 2011 by John Patrone, DWM-SWS

Incinerator, primary chamber door closed (located under yellow walkway)



Natural gas line disconnected. Natural gas valve locked



Heat exchange (cooling) tubes removed



Empty ash collection roll-off container

